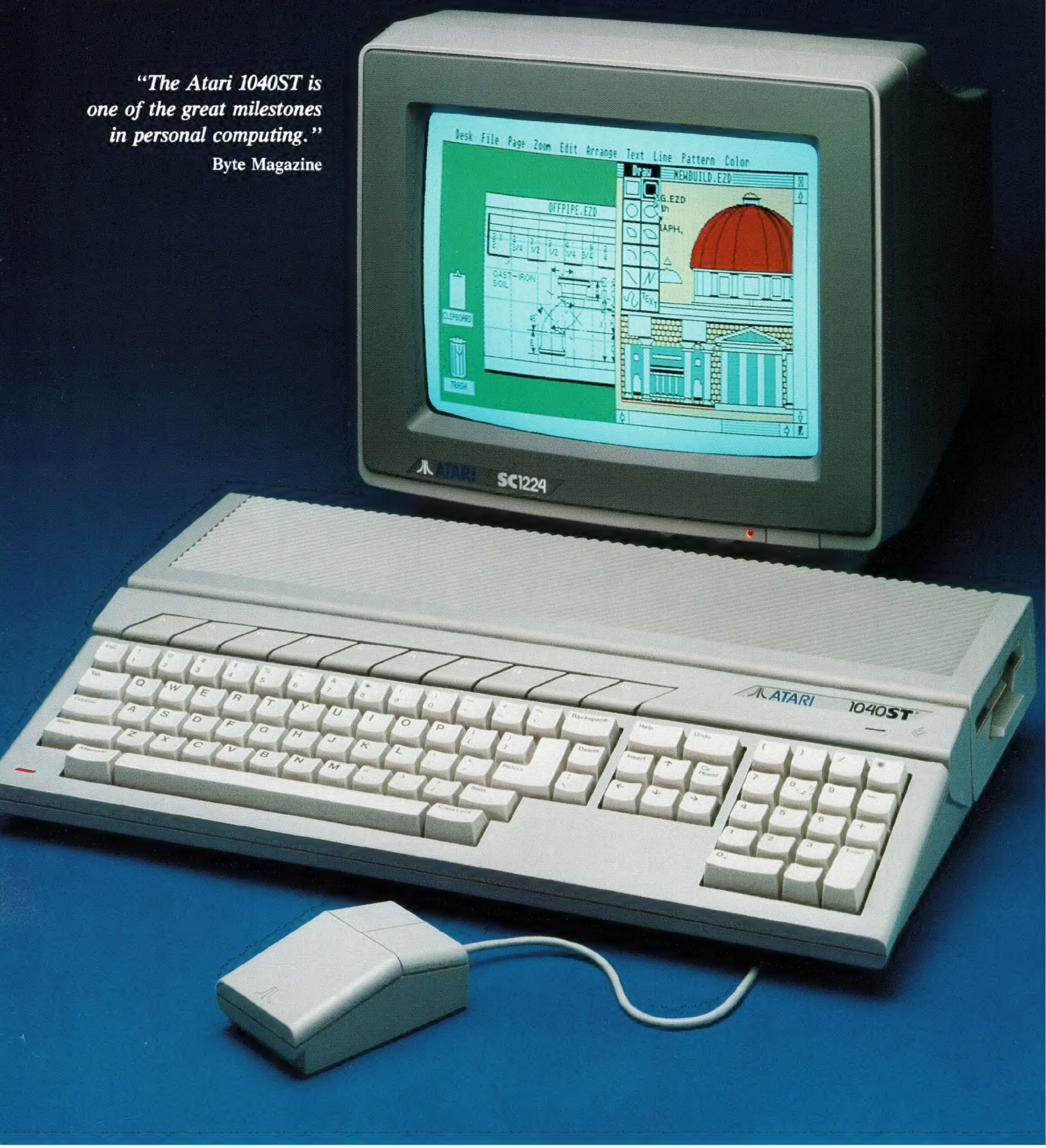
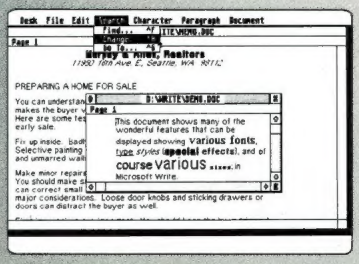
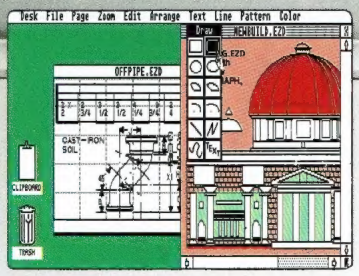
ATARI®
The ST™ Computers

"The Atari 1040ST is one of the great milestones in personal computing."
Byte Magazine

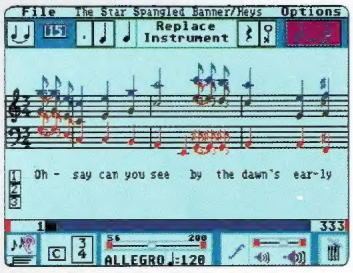




Word Processing



Graphics & Design

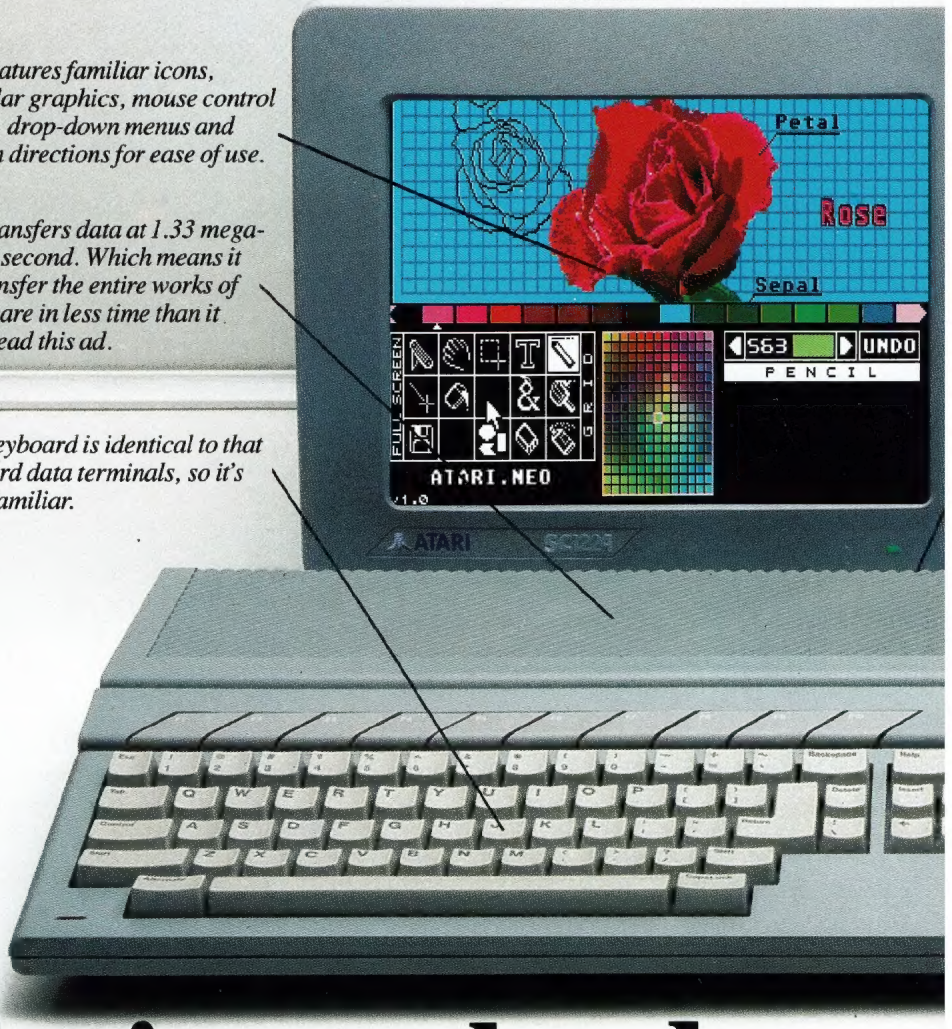


Music Composition

The ST features familiar icons, spectacular graphics, mouse control windows, drop-down menus and on-screen directions for ease of use.

The ST transfers data at 1.33 megabytes per second. Which means it could transfer the entire works of Shakespeare in less time than it takes to read this ad.

The ST keyboard is identical to that of standard data terminals, so it's already familiar.



Introducing technology

Finally, there's a personal computer that not only solves problems like other computers, but also solves the one problem other computers created. Affordability.

Introducing the ST™ Computers from Atari: The 520ST™ with a 512K memory and the 1040ST™ with a full megabyte. The ST was designed utilizing the most recent breakthroughs in semiconductor technology, producing a PC that does more tasks with fewer parts.

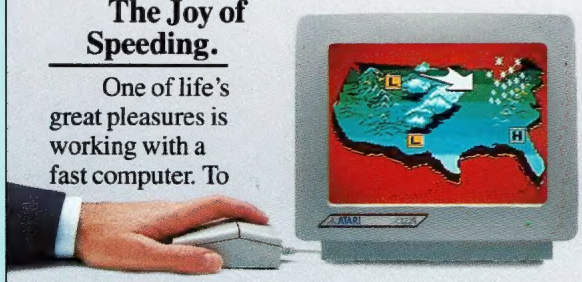
Which means it costs less to make. And less to buy.

The Joy of Speeding.

One of life's great pleasures is working with a fast computer. To bring the ST up to speed, Atari starts with the Motorola 68000 chip—the same "brain" you'll find in the Macintosh.™ Then, Atari adds the extra oomph of four exclusive chips—specially designed to handle several functions simultaneously. (Other PCs limp along handling one function at a time).

This results in making the ST much faster in the computing process. Faster in moving data within the system. Faster in getting information to the screen.

So now, you can run programs like word processing, database management, and financial planning with more zip and efficiency than ever before. A nice feeling.



Compare Our Components.

A computer is only the sum of its components. So we made each one better. Look at the layout of the ST keyboard, for example. You get a full numeric keypad. Plus a cursor control keypad with editing keys. Plus 10 programmable function keys. Now add the mouse and consider the options.

The monochrome monitor is a beauty. Taking its broad bandwidth signal from the ST's exclusive video chip, it displays a resolution of 640 × 400 pixels. This gives you razor-sharp, jitter-free text display for word processing and CAD work (very easy on the eyes). Or, for stunning color images, add the RGB color

T H E **S T** C O M P U T E R S

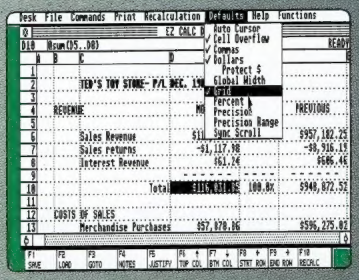
The ST includes a three-voice sound chip with a range from 30 to beyond 20,000 Hertz. The Amiga™ and Macintosh are limited to a maximum of 7,000 Hertz.

The ST works with a wide range of IBM® compatible printers. Including laser printers and plotters.

The easy-to-read manual will have you working on your ST in minutes.

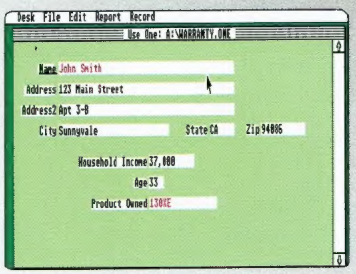
You can use command keys, or a mouse. It's your choice.

The 3-1/2 inch encased disk is more durable and easier to work with than the standard 5-1/4 inch floppy.



Spreadsheets

Entertainment



Database Management

so advanced, it's affordable.

monitor. No interface board needed. Just plug it in. (Try doing that with a Mac!)

You get an external disk drive with the 520ST. An internal, double-sided disk drive with the 1040ST. Both have a disk speed many times faster than previous PCs. And they're blissfully quiet.

Plus, many of the costly peripherals you have to add on with other PCs are already built into an ST. Like the built-in MIDI (musical synthesizer interface) port. And the industry-standard printer port and modem port. And for even more memory, a port for the SH204™ hard disk drive, with twenty megabytes of storage and the fastest transfer rate in the industry.

With hundreds of software programs already available, an ST can grow with your imagination, or your business. Companies like Microsoft,® Spinnaker,® Activision® and more are continually making contributions to the ST software library. And some popular programs originally designed for other computers are actually being upgraded to take full advantage of the ST's capabilities!

The Price of Power.

Best of all, the cost of an ST is so low, it may come as something of a shock.

That's why Info World called it, "The best hardware value of the year." Byte Magazine has said, "The ST is an amazing bargain, much more of a computer for the rest of us than the MAC ever was." And Family Computing summed it up by saying, "With the impressive ST, Atari has delivered on its promise of power without the price." There's an ST with the power you need at a price you can afford.

So now, you don't have to be rich to be powerful.

THE ST™ COMPUTERS from ATARI®

Specifications

	ATARI® 1040ST™ [1]	IBM® PC AT™ [2]	APPLE® MACINTOSH PLUS™ [3]	COMMODORE® AMIGA™
Manufacturers' List Prices*	$999 (mono) $1,199 (color)	$4,675	$2,195	$1,795
Microprocessor	68000	80286	68000	68000
Speed (MHz)	8.0	8.0	7.83	7.16
Standard User-Accessible RAM	1024K	512K	1024K	256K
Cost Per RAM Kilobyte	$0.98	$7.80	$2.14	$7.01
Operating System in ROM	Yes	No	Yes	No
Number of Keys	94	84	78	89
Mouse	Yes	No	Yes	Yes
Floppy Disk Drive	3½"	5¼"	3½"	3½"
Number of Floppy Disk Drives	1	1	1	1
Hard Disk Port	Yes	Yes	Yes	No
Color Video Capability	Yes	Optional	No	Yes
Number of Colors	512	16	None	4096
Screen Resolution: (non-interlaced mode)				
Color	640 x 200	640 x 200	None	640 x 200***
High-Res Monochrome	640 x 400	720 x 350**	512 x 342	None
Built-In MIDI Interface	Yes	No	No	No
Sound Voices	3	1	4	4

*Prices and specifications as of September, 1986. All prices are manufacturers' list prices.
**With optional monochrome board (non bit-mapped).
***Interlaced mode 640 x 400.

(1) The ATARI 520ST offers the same features as the 1040ST, except that it includes 512K RAM and a stand-alone 3½" disk drive, at a suggested retail price of $799 (monochrome monitor) and $999 (color monitor).
(2) The IBM PC is based on the Intel 8088 microprocessor, operates at a slower speed (4.77 MHz) than the PC AT, uses an 84-key keyboard, offers a 320 by 200 unit color screen resolution, and bears a suggested retail price of $2,495. The recently announced IBM PC XT™ 286 is based on the Intel 80286 microprocessor, includes 640K RAM, a 5¼" floppy disk drive and a hard disk drive, and operates at 8.0 MHz, at a suggested retail price of $3,995.
(3) The Apple Macintosh™ offers the same features as the Macintosh Plus, except that it includes 512K RAM and a 59-key keyboard, at a suggested retail price of $1,995. Apple recently announced the 8/16-bit Apple IIgs™, offering 256K RAM (expandable to one megabyte at extra cost), music and voice simulation, graphics, a mouse, and high-resolution monitor (sold separately), at apparent retail prices between $1,600 and $1,900.

Architecture
Central Processing Unit: Motorola 68000 running at 8 MHz.
Memory: 1024K RAM (1040ST); 512K RAM (520ST); 192K ROM; 128K external ROM cartridge.
Data Storage: Built-in 3½" microfloppy disk drive (1040ST), storage capacity 720K (formatted); Built-in microfloppy disk drive port; Second microfloppy disk drive optional; Built-in hard disk (DMA) port; Hard disk drive optional.

Graphics/Sound
Full bit-mapped display.
Monochrome: 640 x 400 pixels.
Color: 640 x 200 pixels x 4 colors; 320 x 200 pixels x 16 colors.
Palette range: 512 colors.
Sound: Three programmable sound channels; Programmable volume; Dynamic envelope shaping; Wave shaping; Programmable attack, decay, sustain, release.

User Interface
Keyboard: Standard QWERTY typewriter format; Separate cursor key cluster; Separate numeric keypad; 94 keys (including 10 function keys); Internal processor; Variable auto-repeat and key-click response.
Mouse: Two-button control; High-precision, non-slip ball motion sensor; Removable ball for easy cleaning.

Input/Output Ports (Built-In)
Printer: 8-bit parallel.
Modem: RS232C; 50–19,200 baud.
Floppy Disk Drive: 250 Kbits/second.
Hard Disk Drive (DMA): 10 Mbits/second.
MIDI (Musical Instrument Digital Interface): MIDI IN; MIDI OUT/THROUGH 31.25 baud; Optically isolated receiver.
Mouse/Joystick: Two ports; Port 0: mouse/joystick. Port 1: joystick.

Operating System
The Operating System (TOS) in ROM.
Hierarchical file structure with subdirectories and path names.
GEM operating environment: Icons; Multiple windows; Window sizing/positioning/scrolling; Drop-down menus (selected with mouse).
GEM virtual device interface.

Standard Software
TOS™ Operating System
GEM™ operating environment
ST BASIC™
Desk Accessories: VT® 52 terminal emulation; Control Panel for system customization; RS232C port configuration control; Install Printer configuration control.

Physical Characteristics
1040ST: Maximum height 2¾"; Width 18¾"; Depth 11½". Internal power supply.
520ST: Maximum height 2½"; Width 18¾"; Depth 9½".

ST Peripherals

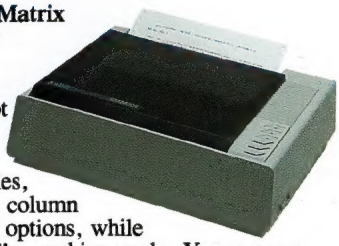
SC1224™ RGB Color Monitor & SM124™ High-Resolution Monochrome Monitor

ATARI Monitors provide sharp data displays, along with dazzling graphics. The SC1224 RGB Color Monitor flawlessly displays the ST's 512 colors. The SM124 High-Resolution Monochrome Monitor defines "state-of-the-art" with its crisp and clear video display.

SF314™ & SF354™ MicroFloppy Disk Drives

Save and protect all your data with ATARI MicroFloppy Disk Drives. The double-sided, double-density SF314 provides 720K of disk storage capacity, while the SF354 is a single-sided, double-density drive with 360K storage capacity.

SMM804™ Dot Matrix Graphics Printer



The SMM804 Dot Matrix Graphics Printer offers an array of print styles, character pitches, column widths, and other options, while supporting the ST's graphics mode. You can use the ST Computer's print screen utility to transfer hi-res designs from the computer directly to the printer.

SX212™ Modem

Here's your link to the world! This advanced modem lets your ST communicate via telephone line with other computers. Two modems in one: a low speed (300 baud) and a high speed (1200 baud). And it provides auto dial and auto answer features.

SH204™ Hard Disk Drive

Connecting the SH204 20 megabyte hard disk drive to your system lets you take advantage of the 1040ST's built-in, high-speed DMA channel (hard disk port). Data transfer (read/write) to and from the drive is virtually instantaneous. High-speed data transfers and 20 megabytes of disk storage all at an incredibly low cost.

ATARI®